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(54) Coin operated gaming or amusement machines

(57) This invention relates to coinoperated or coin-freed gaming machines or amusement with prizes machines. The machines each include a feature enabling nudges, or winnings, to be banked for use in a subsequent play of the machine. A number of different embodiments are described showing different ways in which these features can be made available and different ways in which the banked items may be used.

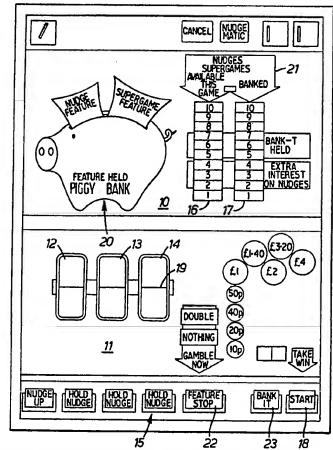


FIG. I.

The drawing(s) originally filed was/were informal and the print here reproduced is taken from a later filed formal copy.

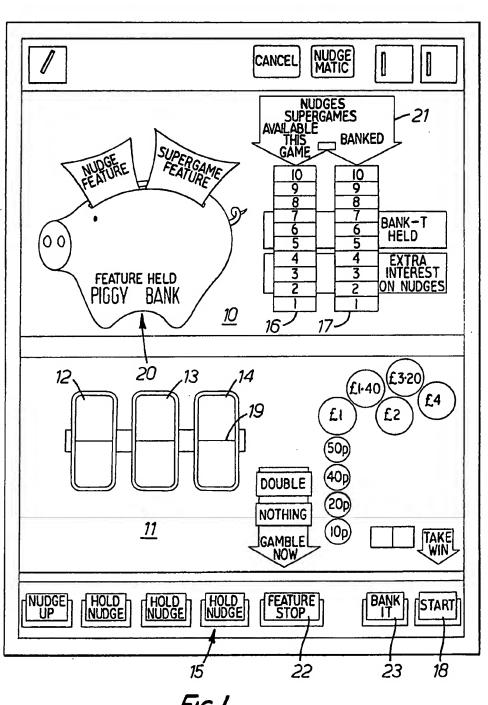
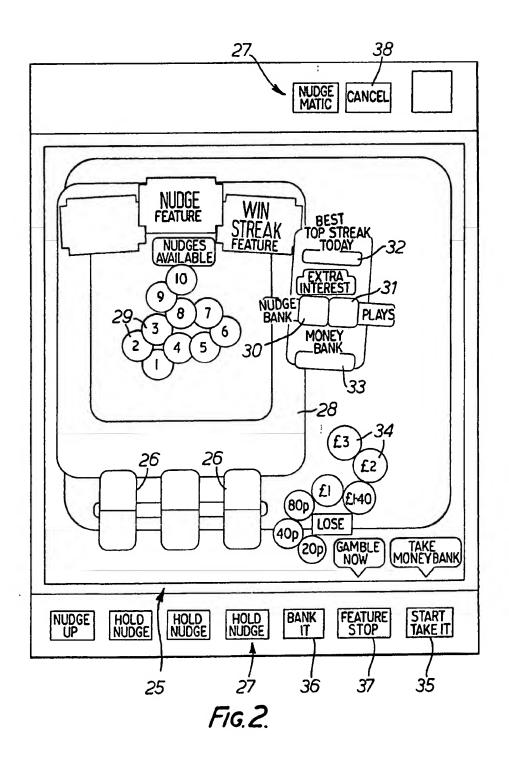


FIG. 1.

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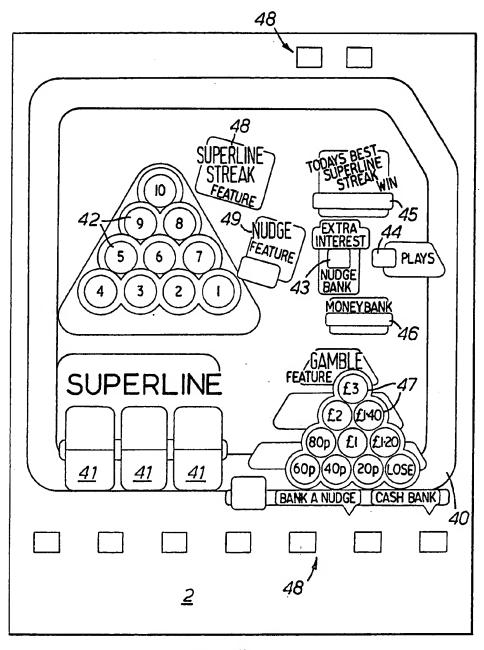


FIG. 3.

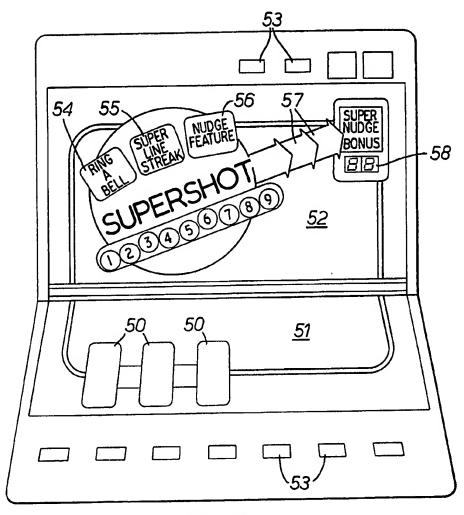
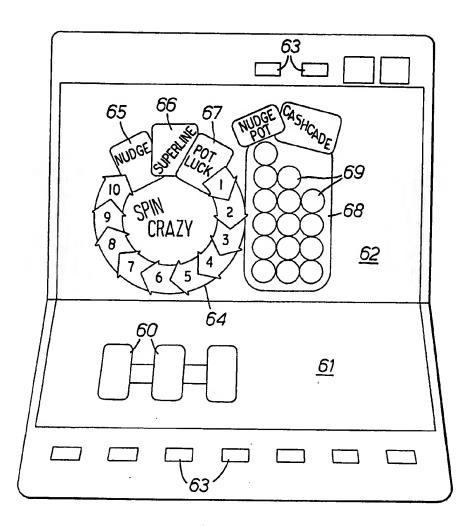


FIG. 4.



F1G. 5.

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SPECIFICATION

Improvements relating to coin operated gaming or amusement machines

This invention relates to coin-operated or coinfreed gaming machines or amusement-withprizes machines of the kind in which a series of symbols are displayed to view in a line.

10 When the machine is operated the display changes and then stops, and if the resultant line of symbols shows a winning combination, a pay-out mechanism is rendered operable or a prize is awarded and indicated.

15 The invention will be described as applied to a machine of this kind (generally known as fruit machines) in which the symbols are displayed on rotary drums, reels or discs, but it will be understood that it can also be applied 20 to machines of this kind in which symbols are displayed on a display device on which indivi-

dual symbols can be illuminated or otherwise distinguished to constitute the equivalent of the combination line.

the combination line.

It has already been proposed that, to add interest to such a machine, it should incorporate a randomly available feature additional to the normal reel spin. One common one known as the nudge feature allows the drums to be
indexed round step by step from the positions in which they stop after the normal spin.
Generally, each drum can be individually indexed up to so many symbol positions, and by this means a different, possibly winning
combination line can be achieved.

It is the aim of this invention to provide another feature to encourage play.

According to the present invention there is provided a gaming or amusement-with-prizes 40 machine of the kind described, wherein when a win or a chance to win or improve upon a win is offered, it is at least sometimes possible for the player to carry out a "banking" operation, whereby there is set aside a number 45 representing a portion of that win or chance for use in a following game, before completing the existing one.

Preferably, there will be the occasional opportunity to gamble the win or chance to 50 win, and this gambling may be on the remainder of the win or chance, after setting aside said number

The number set aside may be modified by the machine for the following game. This may 55 take the form of an increment, equivalent to paying interest on the amount banked. In another form, it could be the reduction or elimination of the number set aside, and this may be done on a random basis. For example, 60 the chance of the banked number remaining for the next game may be 50/50.

In one preferred form, the chance to win or improve upon a win is provided by means of a feature game in which the player is offered 65 a plurality of discrete operations to adjust the

reels, and wherein a number of such operations can be set aside for a following game, whereupon the player can use the depleted stock of such operations for completing the existing game.

This adjustment may be indexing the reels, commonly known as nudging. There may be means for trading money won for such reel adjustments, or vice versa.

5 In an alternative game, the adjustment is spinning the reels, and it may be arranged that at least one such spin will certainly generate a win.

The number of discrete operations that could be available may be displayed and, when the feature game is attained, the player can use as many of the operations as are then showing. This display may be cumulative until use is made of the operations offered. Thus, if the feature game is a long time coming, the number of operations available will have built up into a substantial total, thus enhancing the prospects of a decent win.

There may be more than one feature game, 90 with means for selecting which one or ones are offered.

The amount of a win that could be available should a certain reel combination occur may be displayed, and this possible win may be 95 variable.

For a better understanding of the invention, some embodiments will now described, by way of example, with reference to the accompanying drawings in which the five Figures show the display panels of various fruit machines.

Figure 1 shows upper and lower display panels 10 and 11. Panel 11 includes windows 12, 13, 14 through which the reels 105 may be viewed and operating buttons generally indicated at 15. The upper panel 10 displays information concerning the special feature games of this machine and in particular has numbered columns 16, 17 which 110 display, by means of selective back lighting, the number of operations available under a feature, as will be described below.

The normal game is played by pressing the start button 18 and wins occur in accordance 115 with the symbols displayed at the win line 19. A known double or nothing gambling feature is provided in association with a provision for the player to take half a win before gambling. Symbols, superimposed on the win line, 120 which are like transfer associated by pressing the start product of the start product.

120 which are lit at random, provide a numerical total which determine how many letters of the word PIGGYBANK (shown on the display panel 10 at 20) are lit. If the complete word is lit then the machine enters a feature game
125 mode, indicated for example by the upper and lower sections of panel 21 being alternately lit.

When the player sees that a feature game is available he presses the feature stop button 130 22 and the machine stops in either a nudge

game mode or a super game mode as indicated by which section of panel 21 is lit. At the same time, column 16 has one of its segments lit indicating the number of plays or nudges available. The nudge game only will be described first. If the "8" section of column 16 is lit the player has eight nudges available in that game. He may decide that he does not need all of those nudges in that 10 particular game in order to achieve a win and in that case he may bank some of the nudges for the following game by pressing the "bank it" button 23. Each time button 23 is pressed a single nudge is transferred from column 16 15 to column 17.

If the gamble feature is also available, the player may gamble the nudges in column 16 either before or after the banking operation. However, he can never achieve more than 10 20 nudges in either column.

If a win is available with six nudges then the "nudgematic" button 24 is lit and the best win available is indicated by lighting the appropriate indicator disc 25 on the lower 25 panel 11. In that case pressing the "nudgematic" button 24 will achieve the best win, the reels moving to that position automati-

Once the game is completed the nudges in 30 column 16 will be deleted, if they have not already been used up. There is a pre-set chance, for example 50/50, of the nudge feature being available in the next game. If it is, then the nudges in the bank column 17 35 are transferred to the available column 16 and can be used in that game. As an additional feature, the bank column may pay interest by adding operations up to a total of 10. The chance of interest being "paid" may be

40 60/40. The operation of the super game or guaranteed win game feature is almost identical, but instead of representing nudges, the figures in the columns 16 and 17 represent plays in the 45 super game. For each play, the player presses the start button 18 and the reels spin and stop. At least one of the plays will generate a win. The amount available in any one super game is determined in accordance with the 50 payment percentage of the machine. A maximum total may only be achieved if the player has a sufficient number of super game plays available. Again, the gamble and interest fea-

tures may be provided. 55 As an additional attraction, the selection of nudge or super game features need not be pre-determined but may instead be selected by when the player presses the feature stop button 22. This introduces an element of skill.

It will be appreciated that, in certain circumstances, the pay-out percentage during the feature game may be fairly high, in which case the program can be arranged to inhibit jack-pot symbols from being achieved from 65 the number of symbols available.

reel windows 26, with buttons 27 above and below whose functions are similar to those of Fig. 1. Above the windows 26 there is a sub-70 panel 28 with numbered discs 29 to indicate nudges available. To the side of that there are windows 30, 31, 32 and 33 labelled 'Nudge Bank', 'Plays', 'Best Top Streak Today' and 'Money Bank', which will function as de-75 scribed below. Beside the windows 26 there are discs 34 which can be back lit to indictate the prize won, or standing to be won.

In Fig. 2, the display panel 25 incorporates

A game is initiated in the normal way and if a win occurs the amount is signalled by one 80 of the discs 34. The following alternatives are then available:

i) The player can take the prize by pressing the 'Take it' button 35.

ii) The player can bank a certain amount of 85 the prize by pressing the 'Bank it' button 36. Repeated operation would bank say 10p at a time, the cumulative total showing in the window 33. The machine might impose a limit on how much actually or proportionately to the prize, could be banked in a single play. Having banked a certain amount, the player then takes the rest by pressing the 'Take it'

iii) The machine automatically banks a pro-95 portion of the prize, for example half, leaving the rest available to be taken immediately.

In each of cases (ii) and (iii), what is not banked may be gambled by pressing the button 37. Gambling may also be allowed 100 before the banking operation.

The money in the bank is retained until credits for playing, indicated in the 'Plays' window 31, the machine expire. This may generate a noise, and flash the button 35, 105 which would then be pressed to release the banked money. Interest may be paid, as before.

The machine also offers a bank for nudges, the number of which initially available will be 110 shown by one of the discs 29 in the sub-panel 28. This feature occurs on a random basis. and the number selected is also random.

In a similar manner to the banking of money, the player can, by pressing the button 115 36, put aside a certain number of nudges for the next following game, and "interest" in the form of an extra nudge or two may be added on a random basis. Alternatively, the machine may automatically bank a certain number of nudges. The number banked shows in the window 30.

The maximum prize that can be won if proper use is made of the nudges may be indicated by one of the discs 34. A player can 125 bank nudges until he sees this prize fall or disappear, but then retrieve the situation by pressing 'cancel' button 38. This will restore nudges one by one, and so the player will by this means be able to bank as many nudges

130 as he can without penalty and then nudge the

reels to the prize. A 'nudgematic' button 39 is provided so that this can be done by a single press. Alternatively, pressing that button at the start would bring the reels to the prize-5 winning position and automatically bank the spare nudges.

The 'Best Top Streak Today' window 32 shows the largest cumulative total achieved by a previous player in a single continuous 10 series of games. By virtue of the banking system, this may be encouragingly large.

In Fig. 3, a display panel 40 has reel windows 41 surmounted by a word, SUPER-LINE in this example, whose individual letters 15 can be illuminated one by one. Above that there is a pyramid of discs 42 numbered to indicate nudges available. There are windows 43 to 46 corresponding to the windows 30 to 33 and a group of prize-indicator discs 47.

20 The operating buttons 48 are similar to those of the previously described games.

The reels have translucent windows which may be selectively back-lit. This can be used to generate a win line which is not straight 25 across the middle, for as in normal practice there will generally be three symbol positions clearly showing in each window. The illuminated line may therefore be 'zig-zag'. Also, numbers will be superimposed on at least 30 some of the symbols, and when these are back-lit the total will determine how many letters of the word SUPERLINE will be illuminated. When that word is completely lit up, the machine offers alternative features indicated by alternating lighting of the legends 48 and 49, 'Superline Streak' and 'Nudge'. One

40 stop' button.
If the 'Superline Streak' feature is selected, the machine offers a number of extra reel spins at no extra cost. Each time the reels stop, if there is a win line (not necessarily
45 straight as mentioned above) the amount won, or a portion of it, is banked. There can be more than two wins from a single stop, if more than one symbol on a reel is illuminated: The wins are cumulative, and show in

of them remains permanently on while the

other extinguishes, and this may be machine

generated or the result of pressing the 'feature

50 the bank window 46.

If the 'Nudge' feature is selected subsequent play is as described above. Gambling and interest payments are also possible.

In addition, it is also possible to buy nudges for cash, if a prize is won and a 'Bank-a-Nudge' feature is available, as indicated by that legend flashing for example, the 'bank it' button may be pressed, whereupon two nudges will be credited in windows 43, while 60 20p will be debited from the discs 47. It will be arranged that these nudges may be held over to the following game on a chance basis, for example 50-50.

The reverse arrangement may be provided, 65 enabling nudges to be traded for cash. If, for

example, two nudges were offered but no prize was in sight, the player could then take 20p instead.

In Fig. 4, the reel windows 50 are in a 70 lower panel 51, an upper panel 52 displays various features, and buttons 53 operate the machine.

The reels have superimposed numbers, as in some previous embodiments, and at least 75 one unknown number (not necessarily constant), which may be indicated by a superimposed question mark. As before, these numbers determine the amount of illumination of a word on the feature panel, in this case SU-

80 PERSHOT. The completion of this word generates one of the features indicated by subpanels 54, 55 and 56, some of which have been described above. But, if the complete word and the following arrows 57 are all
 85 illuminated (perhaps using the hold feature for

the reels, when available, to build up a sufficient total), there is then access to the super nudge bonus, indicated in window 58.

While normal play is proceeding the total in 90 this window will gradually be totting up, for example by one every ten games. It could reach 99. If a player achieves access as described above, then he is granted as many nudges as then shown in the window. Usu-95 ally, there will be quite a number, and so he

is practically guaranteed a win. Once that play is completed, the bonus may be returned to zero, or the remainder of unused nudges may be allowed to remain, preferably on a chance 100 basis e.g. a 50/50 chance of continuing the feature on the next game.

In Fig. 5, the reel windows 60 are in a lower panel 61, an upper panel 62 displays various features, and buttons 63 operate the machine. The reels have superimposed numbers including an unknown one, as in Fig. 4.

The panel 61 has an arc of arrows 64, a ring being completed by three sub-panels 65, 66 and 67 indicating different features some 110 of which have been described above. Beside this ring there is a rectangular zone 68 representing a pot filled with discs 69. These will be illuminated randomly from the bottom up to represent a pot with a variable filling.

115 The reel numbers determine the number of arrows 64 illuminated. When the question mark or unknown symbol appears, more arrows are illuminated and there is then triggered a rotational illumination in the direction

120 of the arrows, with a curved line of light progressing around the ring to distinguish groups of adjacent spaces, including the subpanels 65, 66 and 67. This rotation stops at random. If any of the sub-panels are then lit 125 up, the associated feature is available. It can

125 up, the associated feature is available. It can happen that all three are, but it could be two, one or none at all.

If the 'Pot-Luck' panel is illuminated, then there is alternating lighting of the words 'Nudge Pot' and 'Cashcade' above the zone

68, which stops to distinguish one of them.

If 'Nudge Pot' is selected, then the 'pot' or zone 68 empties one-by-one of illuminated discs 69 while arrows 64 light up in correspondence. The player is then granted as many nudges as there were illuminated discs 69.

If 'Cashcade' is selected, then instead of being granted nudges, the player will win 10p 10 or an equivalent token for each illuminated disc 69, the 'pot' depleting as before.

CLAIMS

- A gaming or amusement-with-prizes
 machine of the kind described, wherein when a win or a chance to win or improve upon a win is offered, it is at least sometimes possible for the player to carry out a "banking" operation, whereby there is set aside a number
 representing a proportion of that win or chance for use in a following game, before completing the existing one.
- A machine as claimed in Claim 1, wherein there is at least occasionally the
 opportunity to gamble the win or chance to
- A machine as claimed in Claim 2, wherein it is the remainder of the win or chance, after setting aside said number, that 30 can be gambled.
 - 4. A machine as claimed in Claim 1, 2, or 3, wherein the number set aside may be modified by the machine for the following game.
- A machine as claimed in Claim 4, wherein the modification is an increment.
 - 6. A machine as claimed in Claim 4 or 5, wherein the modification is a reduction or elimination.
- 40 7. A machine as claimed in any preceding claim, wherein the chance to win or improve upon a win is provided by means of a feature game in which the player is offered a plurality of discrete operations to adjust the reels, and
- 45 wherein a number of such operations can be set aside for a following game, whereupon the player can use the depleted stock of such operations in completing the existing game.
- A machine as claimed in Claim 7,
 wherein the adjustment is indexing the reels.
 - A machine as claimed in Claim 8, wherein means are provided for trading money won for such reel adjustments, or vice versa.
- 55 10. A machine as claimed in Claim 7, wherein the adjustment is spinning the reels.
 - 11. A machine as claimed in Claim 10, wherein at least one such spin is arranged to generate a win.
- 60 ...12. A machine as claimed in any one of Claims 7 to 11, wherein the number of discrete operations that could be available is displayed and wherein, when the feature game is attained, the player can use as many 65 of the operations as are then showing.

13. A machine as claimed in Claim 12, wherein the display is cumulative until use is made of the operations offered.

14. A machine as claimed in any preced-70 ing claim, wherein there is more than one feature game and there are means for selecting which one or ones are offered.

15. A machine as claimed in any preceding claim wherein the amount of a win that
75 could be available should a certain reel combination occur is displayed, this possible win being variable.

16. A gaming or amusement with prizes machine of the kind described and substan80 tially as hereinbefore described with reference to any Figure of the accompanying drawings.

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